From-XEROX

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T-712 P.003

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

(Currently Amended) A compound of the formula 1.

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From-XEROX

T-712 P.005

Application No. 10/810,370

From-XEROX

$$Z \xrightarrow{N} V \xrightarrow{Z} N \xrightarrow{Z} N \xrightarrow{N} Y$$

$$Z \xrightarrow{N} V \xrightarrow$$

or

$$Z \longrightarrow N$$
 R_{δ}
 $C - CH_2 - C - CH_2 - C$
 R_{δ}
 R_{δ}
 R_{δ}

wherein Z is a group of the formula -OR1, a group of the formula -SR1, or a group of the formula -NR₁R₂, Y is a group of the formula -OR₃, a group of the formula -SR3, or a group of the formula -NR3R4, n is an integer representing the number of repeat -(CH₂)- or -(CH₂CH₂O)- units, wherein, provided that at least one of R_1 , R_2 , R_3 , R_4 , R_6 —and R_6 is a hydrogen atom, provided that at least one of R1, R2, R3, R4, R5,—and R6 is other than a hydrogen atom, and provided that at least one Z or Y within the compound is a group of the formula -NR1R2 or a group of the formula -NR₃R₄, R₁, R₂, R₃, R₄, R₅, R₆, and R₇ each, independently of the others, is (i) a hydrogen atom, (ii) an alkyl group, including linear, branched, saturated, unsaturated, cyclic, unsubstituted, and substituted alkyl groups,—wherein the alkyl group may be saturated or unsaturated. wherein the alkyl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be placed between the carbon atoms in the alkyl group, (iii) an aryl group, including

unsubstituted and substituted aryl groups, wherein the aryl group may be substituted or unsubstituted and wherein hetero atoms either may or may not be present in the aryl group, (iv) an arylalkyl group, including unsubstituted and substituted anylalkyl groups, wherein the anylalkyl group may be substituted or unsubstituted, and wherein hetero atoms elther may or may not be present in either or both of the alkyl portion and the anyl portion of the arylalkyl group, or (v) an alkylaryl group, including unsubstituted and substituted alkylaryl groups, wherein the alkylaryl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the alkylaryl group, and wherein R7 can also be (vi) an alkoxy group, including linear, branched, saturated, unsaturated, cyclic, unsubstituted, and substituted alkexy groups, wherein the alkoxy group may be saturated or unsaturated, wherein the alkoxy group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in the alkyl portion of the alkoxy group, (vii) an aryloxy group, including unsubstituted and substituted arylexy-groups, wherein the arylexy group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in the aryl portion of the aryloxy group, (vlii) an arylalkyloxy group, including unsubstituted and substituted arylalkyloxy groups, wherein the arylalkyloxy group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the arylalkyloxy group, (ix) an alkylaryloxy group, including unsubstituted and substituted alkylaryloxy groups, wherein the alkylarylaxy group may be substituted or

unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the alkylaryloxy group, (x) a polyalkyleneoxy group, (xi) a polyaryleneoxy group, (xii) a polyarylalkyleneoxy group, (xiii) a polyalkylaryleneoxy group, (xiv) a silyl group, including unsubstituted and substituted silyl groups, wherein the silyl group may be substituted or unsubstituted, (xv) a siloxane group, including unsubstituted and substituted siloxane groups, wherein the siloxane group may be substituted or unsubstituted, (xvi) a polysilylene group, including unsubstituted and substituted polysilylene groups, wherein the polysilylene group may be substituted or unsubstituted or unsubstituted or unsubstituted or unsubstituted or unsubstituted and substituted polysiloxane groups, wherein the polysiloxane group may be substituted and substituted and substituted polysiloxane groups, wherein the polysiloxane group may be substituted and substituted or unsubstituted, or (xviii) a group of the formula

wherein r is an integer representing a number of repeat -CH₂- groups, wherein s is an integer representing a number of repeating -CH₂- groups, and wherein X is (a) a direct bond, (b) an oxygen atom, (c) a sulfur atom, (d) a group of the formula -NR₄₀- wherein R₄₀ is a hydrogen atom, an alkyl group, including linear, branched, saturated, unsaturated, eyelic, unsubstituted, and substituted alkyl groups, wherein the alkyl group may be saturated or unsaturated, wherein the alkyl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be placed between the carbon atoms in the alkyl group, wherein anyl group, including unsubstituted and substituted anyl groups, wherein

the aryl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in the aryl group, an arylalkyl group, including unsubstituted and substituted anylalkyl-groups, wherein the arylalkyl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the arylalkyl group, or an alkylaryl group, including unsubstituted and substituted alkylaryl groups, wherein the alkylaryl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the alkylaryl group, or (e) a group of the formula -CR50R50- wherein R50 and R50 each, independently of the other, is a hydrogen atom, an alkyl group, including linear, branched, saturated, unsaturated, cyclic, unsubstituted, and substituted alkyl groups, wherein the alkyl group may be saturated or unsalurated. wherein the alkyl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be placed between the carbon atoms in the alkyl group, an aryl group, including unsubstituted and substituted any groups, wherein the any group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in the aryl group, an arylalkyl group, including unsubstituted and substituted arylalkyl-groups, wherein the arylalkyl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the arylalkyl group, or an alkylaryl group, including unsubstituted and substituted alkylaryl groups; wherein the alkylaryl group may be substituted or unsubstituted, and wherein hetero atoms

either may or may not be present in either or both of the alkyl portion and the aryl portion of the alkylaryl group, and wherein R_{δ} can also be

(Cancelled) 2.

3. (Cancelled)

+5854235240

4. (Currently Amended) A compound according to claim 1 wherein Z is a group of the formula -OR1, a group of the formula -SR₁, or a group of the formula -NR₁R₂, Y is a group of the formula -OR₃, a group of the formula -SR3, or a group of the formula -NR3R4, n is from 1 to about 100, wherein, provided that at least one of R₁, R₂, R₃, R₄, R₅, and R₆ is a hydrogen atom, provided that at least one of R1, R2, R3, R4, R5, and R6 is other than a hydrogen atom, and provided that at least one Z or Y within the compound is a group of the formula -NR1R2 or a group of the formula -NR₃R₄, R₁, R₂, R₃, R₄, R₆, R₆, and R₇ each, independently of the others, is (i) a hydrogen atom, (ii) an alkyl group having at least 1 carbon atom and having no more than about 96 carbon atoms, (iii) an aryl. group having at least about 6 carbon atoms and having no more than about 50 carbon atoms, (iv) an arylalkyl group having at least about 7 carbon atoms and having no more than about 96 carbon atoms, or (v) an alkylaryl group having at least about 7 carbon atoms and having no more than about 96 carbon atoms, and wherein R_7 can also be (vi) an alkoxy group having at least 1 carbon atom and having no more than about 96 carbon atoms, (vii) an aryloxy group having at least about 6 carbon atoms and having no more than about 50 carbon atoms, (viii) an arylalkyloxy group having at least about 7 carbon atoms and having no more than about 96 carbon atoms, (ix) an alkylaryloxy group having at least about 7 carbon atoms and having no more than about 96 carbon atoms, (x) a polyalkyleneoxy group wherein the alkyl portion of the repeat alkyleneoxy groups has from about 1 to about 12 carbon atoms and wherein the number of repeat alkyleneoxy groups is from about 2 to about 50, (xi) a polyaryleneoxy group wherein the aryl portion of the

repeat aryleneoxy groups has from about 6 to about 14 carbon atoms and wherein the number of repeat aryleneoxy groups is from about 2 to about 20, (xii) a polyarylalkyleneoxy group wherein the arylalkyl portion of the repeat arylalkyleneoxy groups has from about 7 to about 50 carbon atoms and wherein the number of repeat arylalkyleneoxy groups is from about 2 to about 20, (xlii) a polyalkylaryleneoxy group wherein the alkylaryl portion of the repeat alkylaryleneoxy groups has from about 7 to about 50 carbon atoms and wherein the number of repeat alkylaryleneoxy groups is from about 2 to about 20, (xiv) a silyl group, (xv) a siloxane group, (xvi) a polysilylene group with from 2 to about 100 repeat silylene units, (xvii) a polysiloxane group with from 2 to about 200 repeat siloxane units, or (xviii) a group of the formula

wherein r is at least 1, wherein r is no more than about 100, wherein s is at least 1, wherein s is no more than about 100, and wherein X is (a) a direct bond, (b) an oxygen atom, (c) a sulfur atom, (d) a group of the formula $-NR_{40}$ - wherein R_{40} is a hydrogen atom, an alkyl group with from 1 to about 50 carbon atoms, an aryl group with from 6 to about 50 carbon atoms, an arylalkyl group with from about 7 to about 100 carbon atoms, or an alkylaryl group with from about 7 to about 100 carbon atoms, or (e) a group of the formula $-CR_{50}R_{60}$ - wherein R_{50} and R_{60} each, independently of the other, is a hydrogen atom, an alkyl group with from 1 to about 50 carbon atoms, an arylalkyl group with from 6 to about 50 carbon atoms, an arylalkyl group with from about 7 to about 100 carbon

atoms, or an alkylaryl group with from about 7 to about 100 carbon atoms, and wherein R_6 can also be

- 5. (Currently Amended) A compound according to claim 1 wherein at least one of R_1 , R_2 , R_3 , R_4 , R_5 —and R_6 is an unsubstituted alkyl group, an unsubstituted aryl group, an unsubstituted arylaryl group, or an unsubstituted alkylaryl group.
- 6. (Currently Amended) A compound according to claim 1 wherein at least one of R_1 , R_2 , R_3 , R_4 , R_5 —and R_6 is a substituted alkyl group, a substituted anyl group, a substituted anylaryl group, or a substituted alkylaryl group.

7. (Previously Presented) A compound according to claim 6 wherein the substituents on the substituted alkyl group, substituted any group, substituted any lalky group, or substituted alkylary group are halogen atoms, amine groups, ammonium groups, pyridine groups, pyridinium groups, ether groups, ester groups, amide groups, carbonyl groups, sulfate groups, sulfonate groups, sulfide groups, sulfoxide groups, phosphonium groups, phosphate groups, nitrile groups, nitro groups, nitroso groups, sulfone groups, acyl groups, azo groups, alkoxy groups, aryloxy groups, arylalkyloxy groups, alkylaryloxy groups, polyalkyleneoxy groups wherein the alkyl portion of the repeat alkyleneoxy groups has from about 1 to about 12 carbon atoms and wherein the number of repeat alkyleneoxy groups is from about 2 to about 50, polyaryleneoxy groups wherein the aryl portion of the repeat aryleneoxy groups has from about 6 to about 14 carbon atoms and wherein the number of repeat aryleneoxy groups is from about 2 to about 20, polyarylalkyleneoxy groups wherein the arylalkyl portion of the repeat arylalkyleneoxy groups has from about 7 to about 50 carbon atoms and wherein the number of repeat arylalkyleneoxy groups is from about 2 to about 20, polyalkylaryleneoxy group wherein the alkylaryl portion of the repeat alkylaryleneoxy groups has from about 7 to about 50 carbon atoms and wherein the number of repeat alkylaryleneoxy groups is from about 2 to about 20, silyl groups, siloxane groups, polysilylene groups with from 2 to about 100 repeat silylene units, polysiloxane groups with from 2 to about 200 repeat siloxane units, or mixtures thereof, wherein two or more substituents can be joined together to form a ring.

8. (Previously Presented) A compound according to claim 1 wherein R₁, R₂, R₃, and R₄ each, independently of the others, is hydrogen, methyl, ethyl, propyl, butyl, pentyl, hexyl, heptyl, octyl, nonyl, decyl, undecyl, dodecyl, tridecyl, tetradecyl, pentadecyl, hexadecyl, heptadecyl, octadecyl, nonadecyl, or elcosyl.

9. (Cancelled)

10. (Previously Presented) A compound according to claim 1 wherein R_{δ} is hydrogen,

or

11. (Previously Presented) A compound according to claim 1 wherein n is 1, 3, 5, 7, or 9.

12. (Previously Presented) A compound according to claim 1 of the formula

$$\begin{array}{c} H \\ H_3C(H_2C) \\ H_3C(H_$$

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$$C + CH_2O - CH_2 - CH$$

$$H = N$$
 $H = N$
 $H =$

$$C + CH_2O + H_3C(H_2C)$$

$$H_3C(H_2C)$$

$$H_2N + H_3N + H_3N$$

or

$$H_{2}N$$
 $H_{2}N$
 $H_{2}N$
 $H_{2}N$
 $H_{3}C(H_{2}C)_{7}$
 $H_{3}C(H_{2}C)_{7}$
 $H_{2}N$
 $H_{3}C(H_{2}C)_{7}$
 $H_{3}C(H_{2}C)_{7}$
 $H_{3}C(H_{2}C)_{7}$
 $H_{3}C(H_{2}C)_{7}$

13. (Original) A compound according to claim 1 of the formula

14. (Original) A compound according to claim 1 of

the formula

- 15. (Cancelled)
- 16. (Cancelled)

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17. (Original) A compound according to claim 1 of the formula

18. (Currently Amended) A process for preparing a compound of the formula

$$C \longrightarrow CH_{2}O \longrightarrow R_{6}$$

$$R_{7} \longrightarrow C \longrightarrow CH_{2}O \longrightarrow R_{6}$$

$$Z \longrightarrow R_{6}$$

or

wherein Z is a group of the formula -OR1, a group of the formula -SR1, or a group of the formula -NR₁R₂, Y is a group of the formula -OR₃, a group of the formula -SR3, er a group of the formula -NR3R4, n is an integer representing the number of repeat -(CH₂)- or -(CH₂CH₂O)- units, wherein, provided that at least one of R_1 , R_2 , R_3 , R_4 , and R_6 is a hydrogen atom, provided that at least one of R1, R2, R3, R4, and R6 is other than a hydrogen atom, and provided that at least one Z or Y within the compound is a group of the formula -NR1R2 or a group of the formula -NR $_3$ R $_4$, R $_1$, R $_2$, R $_3$, R $_4$, R $_6$, and R $_7$ each, independently of the others, is (i) a hydrogen atom, (ii) an alkyl group, including linear, branched, saturated, unsaturated, eyelic, unsubstituted, and substituted alkyl-groups, wherein the alkyl group may be saturated or unsaturated, wherein the alkyl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be placed between the carbon atoms in the alkyl group, (iii) an aryl group, including unsubstituted and substituted aryl groups, wherein the aryl group may be substituted or unsubstituted and wherein hetero atoms either may or may not be present in the aryl group, (iv) an arylalkyl group, including unsubstituted and substituted arylalkyl-groups, wherein the arylalkyl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be

present in either or both of the alkyl portion and the aryl portion of the arylalkyl group, or (v) an alkylaryl group, including unsubstituted and substituted alkylaryl groups, wherein the alkylaryl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the alkylaryl group, and wherein R₇ can also be '(vi) an alkoxy group, including linear, branched, saturated, unsaturated, eyelic, unsubstituted; and substituted alkexy groups, wherein the alkexy group rnay be saturated or unsaturated, wherein the alkoxy group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in the alkyl portion of the alkoxy group, (vij) an aryloxy group, including unsubstituted and substituted aryloxy groups, wherein the aryloxy group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in the arylportion of the aryloxy group, (viii) an arylalkyloxy group, Including unsubstituted and substituted arylalkylexy groups, wherein the arylalkyloxy group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the arylalkyloxy group, (ix) an alkylaryloxy group, including unsubstituted and substituted alkylaryloxy groups, wherein the alkylaryloxy group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the aikylaryloxy group, (x) a polyalkyleneoxy group, (xi) a polyaryleneoxy group, (xii) a polyarylalkyleneoxy group, (xiii) a polyalkylaryleneoxy group, (xiv) a silyl group, including unsubstituted and substituted silyl

groups, wherein the silyl group may be substituted or unsubstituted, (xv) a siloxane group, including unsubstituted and substituted siloxane-groups, wherein the siloxane group may be substituted or unsubstituted, (xvi) a polysilylene group, including unsubstituted and substituted polysilylene groups, wherein the polysilylene group may be substituted or unsubstituted or unsubstituted and substituted. (xvii) a polysiloxane group, including unsubstituted and substituted polysiloxane groups, wherein the polysiloxane group may be substituted or unsubstituted, or (xviii) a group of the formula

wherein r is an integer representing a number of repeat -CH₂- groups, wherein s is an integer representing a number of repeating -CH₂- groups, and wherein X is (a) a direct bond, (b) an oxygen atom, (c) a sulfur atom, (d) a group of the formula -NR₄₀- wherein R₄₀ is a hydrogen atom, an alkyl group, including linear, branched, saturated, unsaturated, eyelie, unsubstituted, and substituted alkyl groups, wherein the alkyl group may be substituted or unsubstituted, and wherein the alkyl group may be substituted or unsubstituted and wherein hetero atoms either may or may not be placed between the carbon atoms in the alkyl group, an aryl group, including unsubstituted and substituted and wherein hetero atoms either may or may not be present in the aryl group, an arylalkyl group, including unsubstituted and substituted arylalkyl groups, wherein the arylalkyl group may be substituted and substituted arylalkyl groups, wherein the arylalkyl group may be substituted and substituted, and wherein hetero atoms either may or may not be present in either or both of the

alkyl portion and the aryl portion of the arylalkyl group, or an alkylaryl group, including unsubstituted and substituted alkylaryl groups, wherein the alkylaryl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the alkylaryl group, or (e) a group of the formula -CR50R60- wherein R50 and R60 each, independently of the other, is a hydrogen atom, an alkyl group, including linear, branched, saturated, -unsaturated, cyclic, unsubstituted, and substituted—ally/ groups, wherein the alkyl group may be saturated or unsaturated. wherein the alkyl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be placed between the carbon atoms in the alkyl group, an aryl group, including unsubstituted and substituted aryl groups, wherein the aryl aroup may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in the aryl group, an arylalkyl group, including unsubstituted and substituted arylalkyl groups, wherein the arylalkyl group may be substituted or unsubstituted and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the arylalkyl group, or an alkylaryl group, including unsubstituted and substituted alkylaryl groups, wherein the alkylaryl group may be substituted or unsubstituted, and wherein hetero atoms either may or may not be present in either or both of the alkyl portion and the aryl portion of the alkylaryl group, and wherein R₆ can also be

which comprises (I) admixing a compound of the formula

$$C-CH_{2}O-CH_{2}O-NHR_{6}$$

$$R_{7}-C-CH_{2}O-NHR_{6}$$

$$R_{6}HN-O-(CH_{2})_{\Pi}-O-NHR_{6}$$

$$R_{6}HN-O-(CH_{2}CH_{2}O)_{\Pi}CH_{2}-O-NHR_{6}$$

or

with a cyanuric halide at a temperature below about 0° C; and (II) thereafter adding thereto one or more amines of the formulae R_1R_2NH and R_3R_4NH , wherein R_1 , R_2 , R_3 , and R_4 can be either the same as each other or different from each other and allowing the reactants to react at a temperature of at least about 60° C, thereby generating a compound of the formula

or

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$$Z \longrightarrow N$$
 $C \longrightarrow CH_2 \longrightarrow C \longrightarrow CH_2 \longrightarrow CH_2 \bigcirc CH_2$

19. (Cancelled)

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